

1. You start an account with \$500 and an interest rate of 6% compounded yearly. How much is in the account after 3 years?

a) Exponential growth or decay:

b) Identify the initial amount:

c) Identify the growth/decay factor:

d) Write an exponential function to model the situation:

e) “Do” the problem:

2. From 2000 - 2010 a city had a 2.5% annual decrease in population. If the city had 2,950,000 people in 2000, determine the city’s population in 2008.

a) Exponential growth or decay:

b) Identify the initial amount:

c) Identify the growth/decay factor:

d) Write an exponential function to model the situation:

e) “Do” the problem:

3. You buy a car for \$8000 that depreciates at a rate of 11% a year. How much is the car worth after 5 years?
4. You start an account with \$2500 and an interest rate of 6.5% compounded yearly. How much is in the account after 7 years?
5. A newly hatched channel catfish typically weighs about 0.06 gram. During the first 6 weeks of life, its weight increases by about 10% each day. Write a function to model the situation. How much does the catfish weigh after 6 weeks?